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## RESEARCH ARTICLE

### INFLUENCE OF SCHOOL FACTORS ON TEACHER STRESS IN PUBLIC SECONDARY SCHOOLS IN KENYA: A CASE STUDY OF KAKAMEGA NORTH SUB-COUNTY

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#### ABSTRACT

The teaching profession is one of the professions that are considered stressful. This fact has been revealed by many studies worldwide. It is asserted that school factors influence teacher stress more than any other factors. However, some studies have contradicted these assertions indicating that schools are haven of peace and therefore do not generate teacher stress. Therefore, the purpose of this study was to establish the influence of school factors on teacher stress using Kakamega North Sub County as the site of the study. A conceptual framework based on Bray, Camlin, Fairbank, Duntzman and Wheless (2001) concept that stress is influenced by work factors which in turn influences performance of workers was adopted to guide the study. The study established that school factors influenced teacher stress. The influence was however weak with a Pearson correlation coefficient of .238 and was significant. School factors accounted for 4.6% of variation in teacher stress as was signified by Adjusted R square .46. School factors were also found to be significant predictors of teacher stress. ( $F (6, 92) = 2.028, P < .05$ ). As specifically the school factors that influenced teacher stress were; location of the school, evaluation policy on students, gender parity of students, bench marking policy, Board of Management and school ethos, customs and traditions. The factors that had little influence on teacher stress included; class size of below 45 students, class size of 45 and above students, entry behaviour of below 250 marks being the average Kenya Certificate of Secondary education examinations, delegation policy, communication policy, gender parity of teachers, teacher students ratio, school routine, teacher –students relationship, office space, sanitation and students dress code. The study concluded that school factors influenced teachers stress in Kakamega North sub-county. The study recommended that stress audits need to be conducted in schools with a view to improving stress levels among teachers to the benefit of students academic performance. The findings of this study are significant to educationists in identifying strategies to deal with stress levels among secondary school teachers in enhancement of students' academic performance in the Sub County.

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## INTRODUCTION

Globalization of education has led to an increase in the growth of educational institutions all over the world and the education scene in Kenya is not an exception especially with the current scenario of trying to achieve Vision 2030. According to Aikman and Unterhalter (2005), globally, educating a nation remains the most vital strategy for the development of the society throughout the developing world. In essence, teachers are looked upon as the key stakeholders in the teaching profession. Teachers like other workers in different professions do experience stress. According to Sprenger (2011) in a study on stress and coping behaviors among primary

school teachers in North Carolina, one hundred percent of teachers interviewed for this study reported that the teaching profession is stressful, with 72% describing the profession as extremely or very stressful. Decenzo and Robbins (2006) indicate that stress is a dynamic condition in which an individual is confronted with an opportunity, constraint, or demand, related to what he or she desires and for which the outcome is perceived to be both uncertain and important. Stress can manifest itself in either positive or negative way. It is positive when a situation offers an opportunity for one to gain something, but when constraints of demands are placed on us then it is negative. According to Bratton and Gold (1999), stress is now part of the regular vocabulary of managers and employees. While some stress is normal to life, if stress is repeated or prolonged, it causes psychological discomfort. Stress has an impact on productivity. According to Subbulaxmi (2002), stress can have various effects on the individual as well

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as on the organization. Clearly not only the individual suffers but the organization may also be affected by absenteeism, work related accidents, turnover and impaired decision making. People get sick from stress at work and the cost associated with stress is high hence significant to the employer. Stress is associated with constraints and demands. Constraints prevent the person from doing things what he or she desires. Management may not be concerned when employee experience low to moderate level of stress. Such levels may lead to higher employee performance. But high levels of stress or even low levels sustained over a long period of time, can lead to reduced employee performance and thus require action by management. According to Ang'alia, Aloka and Raburu (2016) in their study on school physical environmental factors responsible for stressful experience among teachers in Kenyan special primary schools, there was a weak but statistically relationship between environmental factors and stress among teachers. The study also revealed that school physical factors contributing to teachers' stress included lack of enough latrines and also travelling far distances to school. This study had a target population of 138 teachers from special primary schools and 4 head teachers, a sample size of 138 teachers from special primary schools and 4 head teachers chosen through saturated sampling, the study was guided by the concurrent triangulation design within the mixed methods approach, both descriptive and inferential methods of analysis were used to analyze data. This study used a likert scale while the current study used rating scale adopted from Holmes and Rahe (1967). This study focused on special primary schools, it did not handle school related factors influencing stress among teachers in general secondary schools.

Sprenger (2011) in a study on stress and coping behaviours among primary school teachers in North Carolina found out that unrealistic expectations set forth by school officials and parents were the most frequent source of stress followed by excessive paperwork, and school administration. In Kenya, on causes of burnout among secondary school teachers: a case of Bungoma North district, Kenya, Sichambo, Maragia and Simiyu (2012) revealed that apart from the normal classroom teaching, teachers had a number of remedial lessons to attend to, larger classes to handle, a lot of paper work and some had to stay in their work stations other than their normal school timings in order to complete various tasks. In Nigeria, Olayiwola (2008) in his study on dimensions of job stress among public secondary school principals in Oyo State concluded that public secondary school principals were experiencing job stress in the same dimensions. The reasons were that sources of this job stress were related to administrative routines, inability to delegate, conflicting demands from Ministry and workload. All these studies have shown that the following factors have contributed to stress among teachers: a lot of paper work, larger classes, role overload and unrealistic deadlines. Alan, Chan, Chen, and Chong ( 2010) in their study on work stress of teachers from primary and secondary schools in Hong Kong found out that heavy workload, time pressure, education reforms, external school review, pursuing further education, and managing students' behaviour and learning were the most frequently reported sources of work stress. In a study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland, Okeke and Dlamini (2013), found out that the major stressors included the lack of power and influence, threat of job losses, performance related incentives, poor pay, lack of accommodation, badly planned changes,

temporary contracts, and shortage of teachers. This study employed the descriptive correlation research design to determine the relationship between stressors and teachers stress among secondary schools. This research design was very appropriate in finding the relationship between teachers stress and the teachers working environment. In Nigeria, Sulaiman and Akinsanya (2014), in a study on stress and instructors' efficiency in Ogun State Universities: Implications for Nigerian educational policy revealed that teachers in private universities were less prone to stress than teachers in public universities. Although the findings reflect that the private teachers were saddled with more workloads and lesser job security, they however had better working environment; better remuneration and provision of educational resources as compensation for the imbalance. The teachers in public universities had job security and lesser workloads compared with their counterparts, but these were not appreciated given the kind of remuneration, bad/unconducive working environment and lack of educational resources in the public universities. This situation, however, makes the public universities less desirable to work in when compared with the private set up. This study did not indicate the research design that was used in the study and so it's difficult to authenticate the results. Teachers in private and public universities should not be compared as they are in different environment and under different management. However, this study was limited to influence of employment factors on teachers in public and private universities.

Wangai (2012) in her study on factors affecting job satisfaction among secondary school teachers of Mwatate district, Kenya found out that salary level was ranked as the most important factor towards job satisfaction and poor pay as the most dissatisfying job factor. This study used descriptive survey research design. The target population was 21 secondary schools and 217 secondary school teachers. Twenty three teachers responded out a total population of 217 forming a sample size of 10.5%. This sample size was too small to represent the entire population. The study used questionnaires to collect data. The study could have incorporated other methods such as interviews and focus group discussions to get a variety of responses. In a study on factors contributing to stress among public secondary school teachers in Vihiga district, Kenya Ayoti and Poipoi (2011) found out that stress was caused by; heavy workload, lack of clarity of duties and responsibilities, poor management, substandard equipments and insufficient salaries. This study had a target population of 496 teachers, stratified random sampling was used to select a sample size of 16 teachers and the study adopted descriptive survey research design. Questionnaires and interview schedules were used to collect data, descriptive statistics was used to analyze data. This study also was general, aspects of managements are so many and so the study could have gone specific on management aspects to be able to determine which aspect had the highest influence on stress. The study indicates that the equipments were substandard; however, the study does not specify the types of equipments. This study was not exhaustive; it didn't address the actual contribution of these factors on stress among teachers, a knowledge gap that the current study sought to fill. Ayoti and Poipoi (2011) used handled five factors, these were: insufficient salaries, substandard equipments, poor working environment, poor management, lack of clarity of duties and responsibilities and heavy workload. The current study handled 27 factors, regression analysis was used to analyze data, the contribution

of individual factor was analyzed, and the current study is specific and in-depth. In a study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland, Okeke and Dlamini (2013), found out that the major stressors included the lack of power and influence, threat of job losses, performance related incentives, poor pay, lack of accommodation, badly planned changes, temporary contracts, and shortage of teachers. Alan, Chan, Chen, and Chong (2010) in their study on work stress of teachers from primary and secondary schools in Hong Kong found out that heavy workload, time pressure, education reforms, external school review, pursuing further education, and managing students' behaviour and learning were the most frequently reported sources of work stress. Seng and Yazdanifard (2013) found out that employee or employers with organizational stress tend to characterized by the feelings of helplessness in solving any task that was given. Likewise, stress also has a significant, negative relationship with job satisfaction and organizational commitment such as counterproductive work behaviours, withdrawal behaviours, turnover intentions and depression. All of these aspects will eventually reduce the overall organizational effectiveness and productivity directly or indirectly. However, stress has a positive effect on employees of any organization but only up to a certain extent that an employee can cope with it. For example, some of the positive stress may serve as a motivation among the employer and employee to boost up their job performance. This positive stress may also increase the level of employee's self-confident, self-efficacy and self-worth to enhance believes on their own ability to get the job done well. However, if this stress exceeds the bearable limits, some negative effects might fall upon employees or employer.

Ozturk (2011) on public primary school teachers' perceptions of their working conditions and job stress cases from Istanbul and Stockholm indicated effects of job stress need to be monitored, because they impact not only on the teachers, but indirectly affect students and schools. This study was comparative; it compared perceived working conditions, job stress, and effects of job stress of public primary school teachers working in Istanbul, Turkey, and in Stockholm, Sweden. The study used case study research design. Data collection was done using semi-structured interviews. Istanbul and Stockholm are two different areas under different Geographical conditions and so comparison should not be done. The study used Case study research design which provides an opportunity to study a topic in depth and to gain understanding from the perspective of sampled people. The study however did not indicate the study population and so we can assess the appropriateness of the sample size to the study.

### **Research Objective**

The research objective was: To determine the influence of school factors on teacher stress in public secondary schools in Kakamega North Sub County, Kenya.

### **Synthesis of literature on influence of school factors on stress among teachers**

In America, Shernoff, Mehta, Atkins, Torf and Spencer (2011) in a study on a qualitative study of the sources and impact of stress among urban teachers, one-half of the cases identified lack of resources, excessive workload, school-level disorganization, managing behavior problems, and

accountability policies as significant sources of stress. Curtaz (1997) in her study on perceived causes of stress and burnout as reported by elementary teachers at an urban school, teachers spent many days and nights working toward keeping the school off the closure list. This included several meetings after school and sometimes late into the night, contacting and working with parents as well as getting the word out to the community. The teachers were under an immense amount of stress that was out of their immediate control. Furthermore, teachers interviewed indicated they felt more stress with their jobs when there were problems with the administration. The study used a case study research design. According to Kaur (2011) as cited by Siddiqui (2012), teachers stress is the outcome of school management's disability to fulfill teacher's needs and demands. Further study by Syed, Alain and Muhammad (2012) in their study on impact of organizational role stressors on faculty stress and burnout in Pakistan found out that role ambiguity is one of the organizational role stressors having the biggest impact on two dimensions of stress and one dimension of burnout among the faculty. The other significant organizational role stressors include role stagnation, inter-role distance, self role distance, resource inadequacy, role conflict and role overload. According to Santiago Otero-López, Castro and Villardefrancos (2008) in their study on occupational stress in secondary school teachers: examining the role of students' disruptive behavior and or attitudes and the perceived difficulty in conflict management in Espania found out that the stress associated to students' disruptive behaviour and to the difficulties faced by teachers in managing conflict has a greater incidence on female teachers on second cycle teachers and on intermediate stages in the profession. Santiago *et al* (2008) used Inventory of Occupational Stressors of Secondary School Teachers (Inventario de Estresores Laborales para Profesores de Secundaria -IELPS-; Otero López *et al.*, 2006) to analyze data. The current study used rating scales to analyze data. The study focused on the influence of students' disruptive behaviour on teachers stress.

In a study on occupational stress on job satisfaction among teachers with particular reference to corporate, higher secondary school of Nepal: empirical study, Kayastha and Kayastha (2012) found out that occupational stress is associated with job satisfaction. Occupational stress was negatively associated with six job satisfaction facets. It was seen that a high level of occupational stress will reduce job satisfaction. Reducing occupational stress such as workload; conflict; unreasonable group and political pressures may lead to high satisfaction with regards to work, pay, co-workers, and supervision promotion and job in general. Questionnaires were used to collect data. This study did not indicate the research methodology that was used in the collection data. It's thus difficult to verify its authenticity. According to Torres, Rebecca and Lambert (2009) in their study on job-related stress among secondary Agricultural education teachers: a comparison study in Missouri concluded that Agriculture teachers in Missouri and North Carolina were not in an overall state of stress compared with norm data. However, time related job tasks were found to be a source of stress among both teacher samples, and excessive paperwork was identified as the highest stressor. Low stress items among teachers fell into three broad job related categories best described as supervision, advancement, and inactivity. This study focused on job related stress among Agriculture teachers only. Data was collected by using the job stress survey developed by Spielberger and Vagg (1999).

The study used descriptive-survey research. This is a comparative study and so the researcher could have used correlational research design to correlate the two areas. This study focused on job-related stress among Agricultural education teachers. According to Tsai, Fung and Chow (2006) in Hong Kong in their study on sources and manifestations of stress in female kindergarten teachers, time management and work related stressors were more common sources of stress whereas feelings of fatigue and emotional related symptoms were more common manifestations of stress. Assessment of data was done using teacher stress inventory. Tsai, Fung and Chow (2006) did not indicate the study population to. It's difficult to establish whether the sample size was appropriate. The research methodology was also not indicated and so it was difficult to authenticate the results. The study was limited to female kindergarten teachers. Ozturk (2011), in a study on public primary school teachers' perceptions of their working conditions and job stress: cases from Istanbul and Stockholm found out that for teachers working in Istanbul, the main reasons of job stress were paperwork, computer work, administrative duties; meetings with colleagues and parents, too many conferences; too much work, take work to home; less time; relations with students and their psychological and social well-being, and parents' demands from teachers; the least stressful elements were lunch time, parents' demands on their children, and parents' personal problems.

Zedan and Bitar (2012) on stress and coping strategies among elementary school teachers in Israel found out that the ten greatest causes of stress for Israel teachers were: overloaded classes, problems in pupil behavior, disdain of pupils for class assignments, pupils without motivation, lack of teaching resources (teaching hours, teaching assistants), violence in school, inconvenient working conditions (schedule, workload, etc.), lack of public understanding of the burden placed upon the teacher, overloaded study program, integration of pupils with special needs. A sample size of 425 teachers was selected, what is unknown is whether 425 teachers was a representation of the total population. This study used structured questionnaires to collect data. Questionnaires alone cannot give you enough data, the study could have added other methods which include interviews and document analysis. In a research on a qualitative study of workplace stress and coping in secondary teachers in Ireland Kerr, Breen, Delaney, Kelly and Miller (2011) showed great concern for their students, with some being prepared to ignore school guidelines in order to deal with their pupils' needs. Several particularly stressful factors were identified, including the maintenance of boundaries (especially when dealing with students with personal problems), dealing with disruptive student behaviour, and the heavy workload.

Senthil, Mohan and Velmurugan (2013) in their study on causes of work stress of teachers in Engineering education in India, found out that significant association among gender, type of institution, location of the college, current working status and average number of working hours with causes stress. Questionnaires were used to collect data. This study focused on teachers in engineering education in colleges and universities. In Nigeria, Olayiwola (2008) in his study on dimensions of job stress among public secondary school principals in Oyo State concluded that public secondary school principals were experiencing job stress in the same dimensions. The reasons were that sources of this job stress were related to administrative routines, inability to delegate,

conflicting demands from Ministry and workload. The study used descriptive survey design. Cluster sampling was used to select the sample size of 100 principals was selected. However, the study did not indicate the study population. We cannot verify the appropriateness of the sample size. The study used questionnaires collect data, the study could have also used other methods like interviews to get a variety of data. Olayiwola (2008) focused on job stress among principals.

In a study on prevalence of job stress among primary school teachers in South-west, Nigeria, Olaitan, Oyerinde, Obiyemi and Kayode (2010) revealed that the teachers' major sources of stress were colleagues, curriculum, marking, parents, pupils, school authority, society, supervision / teaching, teaching environment and wages. Jaideba and Jibril (2008) on sources of occupational stress among secondary school administrators in Kano State, Nigeria showed that, administrative routine, work load, and conflicting demands and roles between work and family were the highest sources of stress. Further study by Adeniyi, Fakolade, and Tella, (2010), in their study on perceived causes of job stress among special educators in selected special and integrated schools in Nigeria found out that stress or burnout is caused by several factors as follows: lack of progress achieved on the part of the students and teachers, workload of the teachers, lack of help or assistance, in respect of numbers of special educators available and increase or over population of students especially in mainstream schools. When teachers see little or no progress in student learning, psychological trauma develops and eventually leads to stress. According to Hasting and Brown (2002) as cited by Adeniyi, Fakolade, and Tella (2010) found out that special teachers face high level of anxiety as a result of their pupils' progress. physical environment and resources, workload and time pressure, changes in educational policies, students, parents, rewards, relations with colleagues and principals, role conflict, and school structure and management among other are sources of stress in schools.

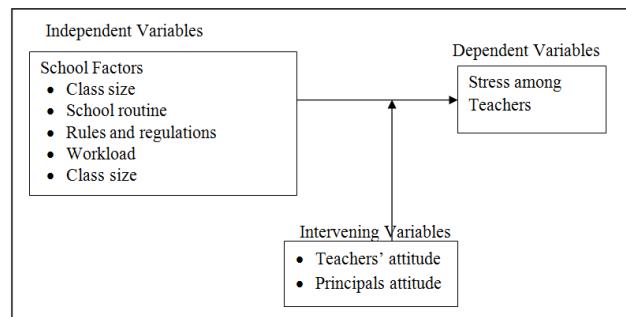
According to Maphalala (2014) in his study on the manifestation of occupational stress in the teaching profession: the unheeded voices of teachers in South Africa, teaching stressors which the teachers found stressful, in order of most to least stressful, were curriculum changes, work load pressures, job insecurity, poor relationship with colleagues, reward and recognition, learners discipline problems, poor rapport with management and role ambiguity. In a research on factors contributing to the causes of work related stress and its impact on performance of teachers in Nkayi district, Zimbabwe, Ncube and Tshabalala (2013), found out that the major causes of stress among the respondents were poor pay, work overload, bad school management role overload and large class sizes. A study on the extent and causes of stress in teachers in the George region by Olivier and Venter (2003) indicated that the stress levels of teachers in the George area were average, but teachers nevertheless expressed concern about teaching factors that cause them stress. In this regard they mentioned inadequate salaries, lack of discipline in the school, unmotivated learners, coping with large classes, time demands, and lack of involvement in decision-making and emotional reactions such as depression. According to Naidoo, Botha and Bisschoff (2013) in their study on causes of stress in public schools and its impact on work performance of educators, strenuous working conditions had a direct impact on educator stress resulting in poor performance. The findings of the seven factors which were organizational support, overload,

remuneration, control, job insecurity, relationship and opportunities and growth opportunities also highlight the reasons why educators were considering quitting the profession. In Kenya, in a study on investigating high school principals' stress in relation to their job experience in schools in Southern Nyanza region of Kenya revealed that the sources of stress: role based, task based, conflict mediating and boundary spanning had a correlation and dependable relationship with high school principals' job experience in schools (Yambo, Kindiki and Tuitoek, 2012). Yambo, Kindiki and Tuitoek (2012) focused on investigating high school principals' stress in relation to their job experience in schools in southern Nyanza region of Kenya. They used descriptive survey. The study was guided by Role Performance and Demand theory by Hebb (1972). Stratified random sampling technique was used to select the sample. The current study used descriptive and correlational research designs. Simple random sampling and purposive sampling technique was used to select the sample size. Rating scales were used to analyze the data. Yambo, Kindiki and Tuitoek (2012) did not investigate on school factors causing stress among other secondary teachers. In Kenya, Ngari Ndungu, Mwonya, Ngumi, Mumukha, Chepchieng and Kariuki (2013) in their study on levels of stress among secondary school administrators and its implication in education management in Kenya established that the school administrators experienced stress in their work. 54.5percent of the respondents recorded high levels of stress resulting from their school workload and other responsibilities. Among the three administrative levels, a bigger proportion of principals recorded high levels of stress compared to deputy principals and heads of departments. This study addressed sources of stress among administrators, however, it did not addresses sources of stress among other teachers, the study also was not exhaustive as it only indicated that administrators experienced stress from workload and other responsibility. Musyoka, Ongutu and Awino (2012), in a study on employees stress and performance of companies listed in the Nairobi Securities Exchange, factors within the organization such as work overload, difficult co-workers, too many responsibilities, demanding and unreasonable deadlines, conflicting demands and unclear expectations did not affect performance negatively. Lack of control over workload, demanding and difficult customers and office politics may have triggered positive stress, which in turn enhanced performance. Further study in Kenya on causes of burnout among secondary school teachers: a case of Bungoma North district, Kenya, by Sichambo, Maragia, Simiyu (2012) revealed that apart from the normal classroom teaching, teachers had a number of remedial lessons to attend to, larger classes to handle, a lot of paper work and some had to stay in their work stations other than their normal school timings in order to complete various tasks. All these factors were contributing in burnout among teachers which were badly impacting their performance. Studies reviewed by Santiago *et al* (2008) in Espania, Olaiyiola (2008) and Duyilemi (1992) in Nigeria and Sichambo, Maragia, Simiyu (2012) and Yambo, Kindiki and Tuitoek (2012) in Kenya showed that school routines, workload, paperwork and students disruptive behaviour contributes to teachers' stress.

### **Conceptual framework**

The conceptual framework (Figure 1) is based on Bray, Calmlin, Fairbank, Dunteman and Wheless (2001) concept that there is a link between stress and job functioning of

employees. The relationship is that there is classic inverted U-shaped relationship between stress and performance that is employees who experience moderate degree of job stress perform their job most efficiently, while those who experience either low or high work related stress show reduced work efficiency. Bray, Camlin, Fairbank, Dunteman and Wheless (2001) also assert that there are job related factors that influence stress among workers.



**Figure 1. A Conceptual Framework Showing the Influence of School Factors on Teachers' Stress**

The conceptual framework postulates that teacher school factors such as class size, workload, school routine, rules and regulations influences teacher stress. Once a teacher is stressed, he/she can be affected positively or negatively and this can affect job performance as signified by student academic performance. If the teacher is affected negatively it leads to poor students' academic performance and if affected positively, leads to good students' academic performance. If a teacher is well paid, has manageable workload, consulted and involved in making decisions on policies, teaches well behaved students, receives support from the administration and given promotions will experience no or less stress. The teacher will concentrate on his/her work and this will lead to good students' results. However, when a teacher is having a big load that he/she is not able to handle, a large class, no promotion, not involved in decision making and more children, the teacher is likely to experience teacher management related stress which will affect his/her performance eventually leading to poor students' results. A stressed teacher can only improve performance when he/she has a positive attitude. Positive attitude will make the teachers work hard to better performance. When a teacher has a negative attitude, will not work hard and so this will lower students' performance.

### **RESEARCH METHODOLOGY**

The study adopted descriptive survey and correlational research designs. The study population consisted of 45 principals, 133 teachers and one Teachers Service Commission County Director. The study used saturated sampling technique to select 40 principals and one Teachers Service Commission County Director. Purposive sampling technique was used to select 99 teachers of the form four 2014 students. Quantitative data was collected using questionnaires and document analysis guide while qualitative data was collected using interview schedules. Data was collected by use of questionnaires, interview schedules, and document analysis guide. Face and content validity of the instruments was determined by experts in the area of Educational Administration whose input was incorporated in the final instruments before going to the field.

Reliability of instruments was established through a test re-test method in 5 (10%) of the schools that were not involved in the main study whereby Pearson's r coefficient of 0.7 and above at a set p-value of 0.05 was considered reliable. In this case the Pearson's r coefficient for teachers' questionnaire was 0.89, hence the instrument was declared reliable. Quantitative data from closed-ended items of the questionnaire was analyzed using frequency counts, percentages and means in order to establish the stress levels. Qualitative data from the open-ended items in the questionnaire and interviews were transcribed and analyzed in emergent themes and sub-themes based on the objectives of the study.

## RESULTS

### Demographic Characteristics of the Teachers

The demographic data of teachers were as shown in Table 1.

**Table 1. Demographic Characteristics of the Teachers (n=99)**

Demographic Characteristics	Frequency (F)	Percentage (%)
Gender		
Male	60	60.6
Female	39	39.4
Total	99	100
Marital Status		
Married	62	62.6
Single	26	26.3
widow	3	3.0
widower	5	5.1
Divorced	3	3.0
Total	99	100
Age in Years		
20-29	23	23.23
30-39	23	23.23
40-49	32	32.32
50 and Above	21	21.22
Total	99	100
Highest Level of Education		
Diploma	12	12.12
Bachelor of Education	54	54.54
Bachelor of Science and Post Graduate Diploma in Education	21	21.22
Masters	12	12.12
Total	99	100
Teaching Experience		
< 5 years	12	12.12
6-10 years	29	29.29
11-15 years	35	35.35
16 and above	23	23.23
Total	99	100

Sixty (60.6%) of teachers were male and 39 (39.4%) were female. This means that majority of the teachers in the sub county were male. Sixty two (62.6%) of the teachers were married, 26 (26.3%) were single, 5(5.1) were widowers, 3(3.0) were widows and 3 (3.0%) were divorcees. This means that majority of the teachers were married. The study also sought to investigate the ages of the teachers. The study categorized the ages of the respondents into four age brackets; Age bracket 20-29 had 23 (23.23%) respondents, 30-39 had 23(23.23%) respondents, and 40-49 had 32 (0.32%) respondents and 50 and above had 21 (21.22%) respondents. It can be concluded that a majority of the respondents were in the age bracket 40-49. This is the age when most parents have a responsibility of raising their children. The study also sought to investigate the level of education of the teachers. The information was

important as it helped in gauging the responses of the respondents. Majority of the teachers had Bachelor degree in education, that is 54 (54.54%), Bachelor of Science and Post Graduate Diploma in Education were 21(21.22%), twelve (12.12%) had Masters degrees while 12 (12.12%) had diploma degrees. The study sought to determine the teaching experience of the teachers. The teaching experience was categorized into four categories that is, <5 years, 6-10 years, 11-15 years, 16 and above years. The results showed that 12 (12.12%) teachers had less than 5 years of experience, 29(29.39%) teachers were in the bracket of 6-10 years of experience, 35 (35.35%) were in the bracket of 11-15 years of experience and lastly 23 (23.24%) were in bracket of 16 and above years. This means majority of the teachers have taught for 6-10 years. The information on experience was important as the more experienced teachers were, the higher their ability to understand the students better. The demographic information enabled as to get balanced information as we had teachers in all the categories, that is single, married, widows, widowers and divorcees.

### Research Hypothesis

The research hypothesis was: There is no statistically significant relationship between school factors and teacher stress in public secondary schools.

To respond to this research hypothesis, Pearson's "r" correlation was used to compute the relationship between school factors and teacher stress. Data used in computing the influence of school factors on teacher stress were obtained from closed ended items in the questionnaire an instrument that was adapted from Holmes and Rae (1967).

**Table 2. Relationship between School Factors and Teachers Stress**

School factors	Teacher stress	
	Pearson Correlation	.238
Sig. (2-tailed)	.022	
N	99	

The results were as shown in Table 2. From Table 2, it can be observed that there was a weak positive relationship between school factors and teacher stress. The relationship was significant as the calculated p-value was 0.022 which was less than the critical value of 0.05. The null hypothesis was therefore rejected. Individual school factors were correlated with teacher stress to establish linear relationships. The results were as shown in Table 3. From Table 3, it can be noted that the relationships between school factors and teacher stress were generally weak and positive ranging from .014 sanitation, ( $X_{17}$ ) to .251 communication channel in school ( $X_9$ ); and weak negative relationships -.112 class size below 45 students ( $X_2$ ) and -.265 location ( $X_1$ ). It can also be noted that, six school factors had a weak, positive and significant relationship with teacher stress. These school factors were: students transfer policy to the schools ( $r=.229$ ,  $N=99$ ,  $P=<.05$ ), communication channels like memos, notices, and announcements on assembly and staff briefs ( $r=.251$ ,  $N=99$ ,  $P=<.05$ ), teacher -teacher relationship ( $r=.249$ ,  $N=99$ ,  $P=<.05$ ). Benchmarking policy on academics ( $r=.220$ ,  $N=99$ ,  $P<.05$ ). School routine ( $r=.206$ ,  $N=99$ ,  $P=<.05$ ), teacher student relationship ( $r=.229$ ,  $N = 99$ ,  $P=<.05$ ). This means that these factors increased stress among teachers. One school related factor had a weak negative significant influence on teachers' stress.

**Table 3. Relationship between School Factors and Teacher Stress**

School Factors /Life Events			Teacher Stress coefficient (Index)
X <sub>1</sub>	Location	Pearson Correlation Sig. (2-tailed) N	-.265 .011 99
X <sub>2</sub>	Class size below 45 students	Pearson Correlation Sig. (2-tailed) N	-.112 .288 99
X <sub>3</sub>	Class size of 45 students	Pearson Correlation Sig. (2-tailed) N	.029 .787 99
X <sub>4</sub>	Class size above 45 students	Pearson Correlation Sig. (2-tailed) N	.157 .134 99
X <sub>5</sub>	Entry behaviour of below 250marks	Pearson Correlation Sig. (2-tailed) N	.162 .123 99
X <sub>6</sub>	Entry behaviour of above 300mks	Pearson Correlation Sig. (2-tailed) N	.078 .460 99
X <sub>7</sub>	Students transfer policy	Pearson Correlation Sig. (2-tailed) N	.229 .028 99
X <sub>8</sub>	Delegation policy	Pearson Correlation Sig. (2-tailed) N	.031 .767 99
X <sub>9</sub>	Communication channel in school	Pearson Correlation Sig. (2-tailed) N	.251 .016 99
X <sub>10</sub>	Evaluation policy on students	Pearson Correlation Sig. (2-tailed) N	.157 .138 99
X <sub>11</sub>	Gender parity of students	Pearson Correlation Sig. (2-tailed) N	.129 .225 99
X <sub>12</sub>	Gender parity of teachers	Pearson Correlation Sig. (2-tailed) N	.189 .071 99
X <sub>13</sub>	Parental support	Pearson Correlation Sig. (2-tailed) N	.116 .271 99
X <sub>14</sub>	Teacher- student ratio	Pearson Correlation Sig. (2-tailed) N	.249 .017 99
X <sub>15</sub>	Decision making in the school	Pearson Correlation Sig. (2-tailed) N	.176 .093 99
X <sub>16</sub>	Office space	Pearson Correlation Sig. (2-tailed) N	.078 .464 99
X <sub>17</sub>	Sanitation	Pearson Correlation Sig. (2-tailed) N	.014 .893 99
X <sub>18</sub>	Co-curriculum activity policy	Pearson Correlation Sig. (2-tailed) N	.168 .112 99
X <sub>19</sub>	Benchmarking policy	Pearson Correlation Sig. (2-tailed) N	.220 .035 99
X <sub>20</sub>	Board of management involvement in school management activities	Pearson Correlation Sig. (2-tailed) N	.019 .860 99
X <sub>21</sub>	School ethos, customs and traditions	Pearson Correlation Sig. (2-tailed) N	.190 .069 99
X <sub>22</sub>	Schools routine	Pearson Correlation Sig. (2-tailed) N	.206 .049 99
X <sub>23</sub>	Teacher-student relationship	Pearson Correlation Sig. (2-tailed) N	.229 .028 99
X <sub>24</sub>	Students' dressing code	Pearson Correlation Sig. (2-tailed) N	.081 .445 99
X <sub>25</sub>	Monitoring students attendance	Pearson Correlation Sig. (2-tailed) N	.067 .524 99

\*Correlation is significant at the 0.05 level (2-tailed)

**Table 4. Stepwise Regression Analysis of Influence of School Factors on Teacher Stress**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.345	.359		6.539	.000
X <sub>1</sub> Location	-.022	.053	-.065	-.415	.012
X <sub>2</sub> Evaluation policy on students	.129	.064	.418	2.031	.047
X <sub>3</sub> Gender parity of students	-.192	.079	-.634	-2.416	.019
X <sub>4</sub> Benchmarking policy	.117	.058	.408	2.021	.048
X <sub>5</sub> Board of Management of school	-.190	.076	-.614	-2.497	.015
X <sub>6</sub> School ethos customs traditions	.199	.078	.518	2.556	.013

a)Dependent Variable: Stress level

Regression Equation  $Y = \beta_0 + \beta_1 X_1 + \beta_2 \beta X_2 + \beta_3 \beta X_3 + \beta_4 \beta X_4 + \beta_5 \beta X_5 + \beta_6 \beta X_6$ 

Where:

Y = is the dependent variable

 $\beta_0$  = is the constant or intercept $\beta_1 X_1$ ---- = is the slope or change in Y, given one unit change in X<sub>1</sub>-----X<sub>1</sub> ---- = is the independent variable**Table 5. Regression Analysis of the Influence of School Factors on Stress among Teachers**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.238 <sup>a</sup>	.057	.046	.475879

a. Predictors: (Constant), School Factors

**Table 6. Analysis of Variance on the Influence of School Factors on Stress among Teachers in Public Secondary Schools**

Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression 9.647	6	.357	2.028	.022 <sup>b</sup>
	Residual 10.042	92	.176		
	Total 19.689	98			

a)Dependent Variable: Teacher management related Stress

b)Predictors: (Constant), School Factors: Location, Evaluation policy on students, Gender parity of students, Benchmarking policies, Board of Management of schools, School ethos and customs and traditions

This is location of school ( $r=-.265$ ,  $N=99$ ,  $P=<.05$ ) which means that it reduced stress among teachers. In stepwise regression analysis, independent variables were added into the equation model one by one and at each stage, any variable which was already included in the model but whose extra sum of squares ( $R^2$ ) contribution had declined to a non-significant level was eliminated. Selection stopped when all non-significant variables were eliminated and all variables that were significant were retained. To determine the influence of school factors on teacher stress, regression analysis was done and the results were as shown in Table 5. From Table 5, it can be observed that school factors accounted for 4.6% of variation in teacher stress as signified by adjusted R square .046. This means that 95.4% could have been due to other factors that were not subject to this study. The influence was generally small but practically significant. To determine whether school factors were significant predictors of teacher management related stress, ANOVA was computed and the results were as shown in Table 6. From Table 6, it can be observed that school factors were significant predictors of stress among public secondary school teachers in Kakamega North sub-county ( $F(6, 92)=2.028$ ,  $P<.05$ ).

## DISCUSSION

Seventeen school factors had weak positive influence on teachers' stress level. The influence was not significant. These were: class size of 45 students class size of above 45 students, entry behaviour of below 250 marks, entry behaviour of above 300 delegation policy, evaluation policy in the school, gender parity of students, gender parity of teachers, parental support, decision making in the school, office space, sanitation, co-curriculum activity policy, board of management involvement in school management activities, school ethos, customs and

traditions, students dressing code, and monitoring students attendance. This mean that these factors did not influence teacher stress. Proper channel of communication is very important for faster passage of information from one person to the other. The study established that the channel of communication had a weak positive significant relationship with teacher stress. The study established that communication channel in schools was poor, teachers were stressed as the information was in most cases not relayed on time. In a situation where the channel of communication is not clear, it leads to delay in passing information from one person to the other. In schools, Principals sometimes break the channel of communication and so information is passed to the students before it gets to the teachers and this influences stress on a teacher. During the interviews with the Principals, it was revealed that in most schools, there had been delay in the delivery of information. This leads to disagreements among the staff members. For instance, Principal (P, 4) stated: "I use short text messages and notices to communicate to teachers, sometimes teachers receive the messages and pretend not to have received. Sometimes the messages are not delivered and so they don't attend crucial meetings and other important issues in the school. This leads to disagreement which causes us stress." This interview finding really means that communication channels in schools increases teacher stress, particularly distress. Nevertheless, this factor was a significant predictor of teacher stress. Schools have their own examination policies. School routine had a weak, positive significant influence on teachers' stress. The study findings from the open ended question showed that reporting time and departing time influenced stress negatively among teachers. A teacher completes the work of the day but has to stay in school until evening.

This distresses the teacher. It was also revealed that teachers like doing things differently. Dealing with issues and school activities in the same manner stresses teachers. The findings disagree with the findings of Adebola and Jibril (2008) in their study on sources of occupational stress among secondary school administrators in Kano State, Nigeria that administrative routine was the highest source of stress. Adebola and Jibril (2008) used descriptive statistics to analyze the data, the current study used inferential statistics to analyze the data, which means the findings of this study can be used to make inferences. People are very sensitive when they feel something unusual is going on between a teacher and a student especially when it is between a male teacher and a female student and so in many schools, administrators tend to warn male teachers to maintain a healthy relationship between them and students. During the interview with the Teachers Service Commission County Director, it was observed that a teacher may wish to assist a student who may misinterpret the teachers' intention and hence making the teacher frustrated and distressed. For instance, the Teachers Service Commission County Director said "There are many cases brought to our office relating to teacher student- relationship. On investigation, it is realized that students and other teachers misinterpreted the teachers' action. By the time the teacher is freed from the allegations, he/she is stressed. This demoralizes a teacher and many opt to leave the profession."

Another Principal (P, 7) said "Teachers complain that sometimes there's a pupil who's clearly upset about something and they know they could help by having a private chat, but they cannot be free to assist, they are afraid that someone can say something negative about them. They feel stressed when they cannot assist the student. "Indeed these interview findings indicated that teacher-student relationship was distressful. Teachers have always known from their own experience that small classes provide better learning environments. In small classes (classes of below 45 students) they are more able to concentrate on teaching. They spend less time in behaviour monitoring and control of disruptions because they are more able to deal with problems promptly as they arise and before they became serious, this result in a reduction in the amount of stress in the classroom environment. It was revealed from open ended question that the lesser the number of students the lesser the paperwork: in small classes there are fewer behavioural problems. With the reduction in the number of disturbing incidents and a reduction in the number of disengaged students there is a change in the classroom atmosphere and this reduces teachers stress. In this respect, one Principal (P, 10) stated "Overcrowded classes make it harder for students to learn, most students are affected as the teachers spends most of his/her maintaining order in class and this distresses the teacher." Students with an entry behaviour of above 300 marks are preferred by the teachers, most of them given enough support perform well in class, much energy is not spent on them and the syllabus is covered faster as little time is spent on concepts. Teaching profession is very demanding and so dealing with brighter students reduces teacher distress. These students need guidance on some issues and so they can handle some issues on their own. During the interviews with the Principals, it was noted that students with these marks do not require much effort from the teacher to perform well in class. Syllabus coverage is faster as the teachers do not spend much time on a certain aspect. In this respect, Principal (P, 9) stated "Teaching students who scored above 300 marks is enjoyable.

I am able to do much in one lesson. These students read a head of the teacher and they make my work easy. They make notes on their own; I just need to guide them." The results also showed that decision making in the school had a weak positive relationship that was not significant.

A restrictive bureaucratic environment with low levels of participation from the teachers may influence staff's experience of stress, staff's experience of stress, while participation by the teachers may give the feeling of some control of the stressors in the environment. During the interviews with the Principals, it was revealed teachers were not involved in decision making in the school. This distresses them as they are forced to get involved in the issues they were not consulted. As much as the teachers feel it is the principal's job to make leadership decisions, they feel, not being included in the decision making process can be very distressful. In this respect, Principal (P, 13) stated: "I don't involve teachers in making all the decisions in the school. This is because they tend to waste a lot of time and only back up what will favour them. I dictate and this leads to confrontation with the teachers and this distresses them." Another Principal (P, 21) said "Teachers feel that they are not given the opportunity to air their opinions or concerns and that their suggestions are rejected by principals, other colleagues and learners. They feel left out if nobody listens to them and this disturbs them. They want to participate and contribute to the decision-making process of the school."

These findings are in agreement with the findings by Howard and Johnson (2004) that teachers feel distressed when the administration structure is very hierachal and concentrated in the hands of few. The study also revealed that teachers also experience distress when the principal has an autocratic leadership style. The findings are also in line with Sindhu (2013) in his study on factors influencing distress and coping strategies among the college teachers of Kerala state who found out that the factors that caused stress always were mainly due to the interference of the employment organizational responsibilities with their family organizational role, lack of their involvement in decision making that reduced their responsibilities and the participatory model in their organizational set up which enhanced their responsibilities to the point of exhaustion. The sample was collected from the state of Kerala.

Parents' attitude towards teachers is a most disturbing factor. Teachers feel that they do not receive the necessary support and appreciation from parents, and the community poses a serious hindrance to learning and this distresses the teachers. During the interviews with the Principals, it was observed that some parents are not ready to motivate teachers to teach extra lessons yet they will keep complaining when students perform poorly. Some parents are not able to pay fees on time and so students overstay at home when requested to get fees. In this respect, Principal (P, 24) stated "Teachers are distressed when students are not able to sit for examination because of lack of school fees. I need money to run the school and so I am forced to ask students to get fees from their parents. Teachers feel stressed especially when their top students are affected. Some parents are not supportive at all on the issue of motivation and so teachers are stressed when I request them to teach extra hours without pay." Another Principal (P, 8) stated "Teachers generally want to have a positive attitude towards the parents. The development of a negative attitude towards a parent causes

a moral conflict within the teacher and this leads to a teacher feeling guilty because she/he feels that he/she is to blame for the negative attitude towards a parent. This, negatively influences self image of a teacher and eventually distresses the teacher involved.

The findings of this study support the findings of Ekundayo and Kolawole (2013) in their study on stress among secondary school teachers in Ekiti State, Nigeria that lack of support from the parents is a stressor. The findings are also in agreement with the findings of Ozturk (2011) in his study on public primary teachers' perception of their working condition and job stress in Istanbul and Stockholm that relations with students and their psychological and social well-being, and parents' demands from teachers; the least stressful elements were lunch time, parents' demands on their children, and parents' personal problems. Support from supervisors and colleagues helps to reduce stress at work place. Without much support from the supervisors and peers, the workers feel alone and dissatisfied and their pace of work and performance retards. It was revealed from open ended questions that teachers sometimes differ over petty issues in the staffroom and this stresses them. The study findings are supported by Okeke and Dlamini (2013) in their study on an empirical study of stressors that impinge on teachers in secondary schools in Swaziland, found out that it was a factor that had the least stress. The study findings are also inconsistent with the findings of Maphalala (2014) in his study on the manifestation of occupational stress in the teaching profession: the unheeded voices of teachers that teaching stressors which the teachers found stressful, in order of most to least stressful, were curriculum changes, work load pressures, job insecurity and poor relationship with colleague.

The findings are further supported by Hastrup, Ekundayo and Kolawole (2013) in their study on stress among secondary school teachers in Ekiti State, Nigeria that poor working conditions, poor relations with super-ordinates and late payment of teachers' salaries were major sources of stress among teachers. These were followed by poor relations with colleagues, inadequate physical facilities in schools, indiscipline on the part of the students as well as lack of support from the parents. However, Karaj and Rapti (2013) in their study on teacher job stress in Albania: examining the role of students' classroom disruptive behavior and other factors in the school context found out that relations with colleagues were not found to be a significant predictor of teacher stress. The findings are also in consisted with the findings of Chona and Roxas (2009) in their study on stress among public elementary school teachers in Baguio city Philippines that teachers in their study on stress among public elementary school teachers in Baguio city that increase level of competition among colleagues, colleagues undermining competence or personality and not airing of personal opinion was the least stressor.

On Sanitation, office space and delegation policy teachers are more concerned with cleanliness in their working environment as they know very well that it may lead to transmission of diseases. Findings from open ended question showed that teachers were stressed by the fact that they were not free to speak their mind in school. They felt like prisoners. When they want to attend to their personal issues, they could not delegate their responsibility to another teacher, they were forced to seek permission from authority yet maybe the teacher wanted to be

out for just an hour. The results are in line with the findings by Education International and European Trade Union Committee for Education (1999) that lack of financial resources for sufficient materials, class rooms and equipment; environmental noise; poor ventilation; and problems with hygiene and safety were just some of the bad working conditions. This caused a great deal of stress because these feelings clash with the teacher's personal ambitions and goals for fulfilling their job and providing a quality education, and the educator is left at a loss.

A class size of more than 45 students, had a weak positive statistically relationship with teachers stress, when a class has more than 45 students, it means that the teachers involved had more responsibilities to handle including paper work, supervision and guidance. More students in a class also mean more disrupting students in a class and managing them requires more energy which distresses the teacher. During the interviews, it was noted that most teachers preferred to deal with classes of below 45 students. Principal (P, 34) stated "Having more than 45 students in a class means that when it comes to marking of the assignments, more energy and time will be required as compared to having small classes. When it comes to students' discipline, the teacher involved has to be very keen for the students to be very attentive. This is very distressful. Teachers with a higher teaching load are frustrated. Teaching overcrowded classes is irritating.

Another Principal (P, 9) stated "Most teachers are very uncomfortable with classes of above 45 students. They complain so much especially when it comes to marking of the examinations. Most of them don't beat the deadline and so we are forced to keep changing the deadline. On preparation, monitoring, marking of the examinations, grading and discipline rather than relating to individual students or using innovative instructional approaches, are problems frequently identified with large classes. The Teachers Service Commission county director said: "Most teachers want to be transferred to younger schools. They give change of environment as the main reason but when asked about the environment, too much work is cited as the main reason". These results are in line with the findings by Zedan and Bitar (2012) in their study on stress and coping strategies among science elementary school teachers observed that overloaded classes were the greatest source of stress. These findings are also in line with the findings of Pervez and Hanif (2003) in their study on level and sources of work stress among women school teachers that level of stress is high among teachers who have to teach more number of students in a class. These findings are inconsistent with the findings by Hanif, Tariq, and Nadeem (2011) in their study on personal and job related predictors of teacher stress and job performance among school teachers in Government and private schools in Islamabad (Pakistan) that number of students was a significant predictor of teacher stress. The findings are further supported further by Chona and Roxas (2009) that teachers in their study on stress among public elementary school teachers in Baguio city that large class size was a major stressor among teachers.

Students with 300 and above marks require a teacher to give them more attention, a teacher who will rush through the syllabus will not be moving together with the students. This really stresses a teacher. In reality all classes have students of mixed ability, so some pupils are ready to fly ahead with one topic while others are struggling. Most teachers hate leaving

anyone behind. They really want to help them, but there isn't always the time and so this really stresses them. During the interviews with the Principals and the Teachers Service Commission County director, it was revealed that students with 300 and below marks tend to require more effort from the teacher. This causes stress to the teacher especially when the teacher has to go through a certain aspect for the students to understand and this stresses the teacher. For instance Principal (P, 15) said "Students with 300 and above marks are easy to handle in class. You don't need to struggle that much. This are high achievers, with those with low marks, below 300, you cannot complete the syllabus on time as you have to waste a lot of time on a single aspect." This makes the teacher to fail to meet the targets set by the administration.

The study also established that students transfer policy had a weak positive relationship with teachers stress, the relationship was significant. When a student is admitted in a school, teachers are not involved in the admission and later it is realized that a student is forced to do a subject that she/ he does not have background knowledge from another school. During the interviews with the Principals and Teachers Service Commission County director, it was observed that teachers feel demoralized especially when their good students transfer to other schools. Sometimes when students get to form four, they are grouped according to their abilities and this demotivates the teacher. For instance Principal (P, 3) stated: Interviews are sometimes not done when admitting a student in our school and this is a policy in our school and so later we discover a student was admitted and the student is not performing well and so teachers get distressed dealing with such students. Sometimes we don't pay much attention to the subjects that were done in other schools but later we discover a student cannot fit in our system.

Students dressing code is also a stressor in schools. Students' misbehavior in dressing code provokes stress reactions because it disrupts teaching; it irritates a teacher so much so interferes with his/ her teaching. During the interviews with the Principals, it was noted that teachers are stressed by the students' character. It was observed that the character of the students could be detected from the students' behaviour. The study findings from open ended question, showed that classroom discipline and managing disruptive students demand time and energy from teachers and are linked to a sense of stress. When a teacher witnessed a student physically assaulting or intimidating another student, a student verbally abusing another student and a student verbally abusing a teacher, he is distressed as the teacher sometimes feels helpless. Students' misbehavior, such as cultism, examination malpractice, and mode of dressing general indiscipline stresses the teacher. For instance Principal (P, 13) stated: "Students who are indiscipline tend to wear wrong uniform and so a teacher is forced to confiscate the uniform. This exercise of confiscating wrong uniforms distresses the teacher as sometimes students engage in hide and seek game with the teacher."

The study findings are in line with Allan, Chan and Elaine (2009) in their study on work stress of teachers from primary and secondary schools in Hong Kong that managing student behaviour is the most frequently reported source of stress. The findings are also in line with the findings by Oliver and Venter (2003) who found out that inadequate salary, lack of discipline in the school, unmotivated learners, coping with large classes,

time demands, lack of involvement in decision-making and emotional reactions such as depression causes negative stress. On the whole, school factors had a weak positive statistically relationship with teachers' stress. This means that teachers in Kakamega North Sub County were stressed, but school factors contributed little to the teachers' stress. The school based stressors were many and whereas some seemed significant, some were apparently not. Hence, the need to compute stepwise regression analysis to determine the real school factors that were responsible for teachers' stress.

School ethos, customs and traditions were the strongest predictors of teacher stress. This means that one percent increase in school ethos, customs and traditions increased teacher stress by .199 percent as signified by a coefficient of .199. During the interviews with the Principals, it was revealed that teachers were stressed when they were forced to do their duties basing on the tradition that was set long time ago. This demoralized teachers and stressed them as they could not come up with new ideas. Indeed the tradition of the school increases stress among teachers. Teachers would wish to do their administrative duties in different ways and not to follow the tradition of the school. When they are not allowed this stresses them so much. For instance, in some situation, school administration may not be willing to embrace new technology because of the tradition of the school. These findings are consistence with the findings of Sichambo, Maragia and Simiyu (2012), Naido, Botha and Bisschoff (2013) and Ncube and Tshabalala (2013) who in their studies found that school ethos, traditional and customs pertaining to poor pay, work overload, large class sizes, strenuous working conditions in Bungoma North Sub County, Kenya and Nkayi District, Zimbabwe.

Gender parity of students negatively influenced teacher stress. That is, for every one percent increase in gender parity, teacher stress reduced by .192 percent as signified by the coefficient of -.192. Gender parity of the students had a weak negative significant relationship with teachers stress. Schools can have boys only, girls only or boys and girls. Some teachers are comfortable teaching girls only, boys only or boy and girls in mixed schools. In mixed schools, when the ratio of boys to girls is not 1:1, teachers are forced to provide guidance and protection to group that has fewer students. The study findings from open ended question showed that teachers in mixed schools were stressed by the fact that sometimes the ratio between boys and girls is 1:10 and in a situation where girls are few, they are forced to protect the girls and this stresses them. The qualitative data obtained did not concur with quantitative data as quantitative data indicated that gender parity reduced teachers' stress. These findings were consistent with Senthil Mohan and Velmurugan (2013), in their study in India, where they established significant association between gender and stress of teachers. The stress is due to the many and complicated demands that arise when there is gender disparity of students. Board of Management involvement in school management activities reduced teacher stress. That is, for every one percent increase in Board of Management involvement in school management activities, teacher stress reduced by .190 percent as signified by the coefficient of -.190. Board of Management can provide teaching and learning resources to teachers to improve students' performance, they ease teaching pressure much hence reducing the teachers stress. It was established that board of management involvement in school activities is a predictor of teacher stress.

The demands from the Board of Management can be very realistically high to be attained and hence motivate the teacher. During the interviews with the Principals, it was revealed that teachers feel that the Board of Management speaks on behalf of the Principal and so when the Principal has a negative attitude towards the teacher, the attitude is passed to the Board of Management. In this respect, the Teachers Service Commission County Director said, "When even more pressure is added from administrators, stress levels increase and burnout worsens. Unfortunately, this causes many teachers to never see beyond their fifth year in the teaching profession. Most Principals don't protect their teachers. Sometimes if they have personal issues with the teacher, they influence the Board of Management to be against the teacher too.

So this has always made teachers to have a negative attitude towards them." The qualitative finding differed with that of quantitative with qualitative findings indicating that Board of Management engagement reduces stress of teachers, while qualitative findings indicating that Board of Management increases stress of teachers. Notwithstanding the quantitative and qualitative findings, the findings of this study concur with those of Curtaz (1997) that teachers are stressed when there are problems with management. This is because many stakeholders get concerned and involved. Thus teachers feel obliged to spend many hours day and night working toward keeping the schools off the closure list. This specifically include several meetings after school and sometimes late into the night, contacting and working with parents, as well as getting the community's support. These findings further disagrees with those of Kaur (2011) cited in Siddiqui (2012) who established that teachers' stress is the outcome of school management's disability to fulfill teachers needs and demands.

Evaluation policy on students increased teacher stress by .129 percent as signified by the coefficient of .129 percent. That is, for every one percent increase in evaluation policy, teacher stress increased by .129. Indeed the number of examinations done in school determines the amount of paperwork in the school, the more the paperwork, the more the stress on the part of the teachers, During the interviews with the Principals, it was revealed that teachers feel that the too many examinations increased stress. It was established that in some schools, students sat for five examinations while in others four examinations in a term. In this respect, the (P, 19) Principal said, Teachers complain so much when they have to do more than three examinations in a term. They feel that examinations increases workload on the many lessons that they already have. This is especially when they are given short deadlines. Indeed too many examinations causes stress in real life situation as the teacher has to carry some work home. Some schools do two examinations while some do uncountable many examinations. In a situation where so many examinations are done, teachers get stressed as they do not have time to revise and cover the syllabus. It was revealed from open ended question that in some schools students sit for three examinations in a term while in others they do many examinations. Teachers are distressed by the marking that is done especially when the class population is big. Language teachers are stressed by the marking of compositions. Teachers feel they need time to mark, do corrections before submitting the marks and sometimes the deadlines given are short and so teachers are distressed. Information from document analysis also revealed that in some schools, students were doing more than three sets of the examinations. These findings are further supported by

Ozturk (2011), in a study on public primary school teachers' perceptions of their working conditions and job stress: cases from Istanbul and Stockholm found out that for teachers working in Istanbul, the main reasons of job stress were paperwork and too much work. This is further supported by Sichambo, Maragia and Simiyu (2012) who revealed that apart from the normal classroom teaching, teachers had a number of remedial lessons to attend to, larger classes to handle, a lot of paper work and some had to stay in their work stations other than their normal school timings in order to complete various tasks which included marking students' work. All these factors were contributing in burnout among teachers which were badly impacting their performance.

Benchmarking policy increased teacher stress by .117 percent as signified by the coefficient of .117 percent. That is, for one percent increase in benchmarking policy teacher stress increased by .117. The study established that teachers were stressed when they have to go to other schools performing better than them to get data on how to better their results. They were also distressed by the fact that they were forced to go for benchmarking to other schools, and the reception they were given in most schools was bad. Teachers felt that they were given a bad reception by teachers in other schools, they felt inferior in other schools and that really stressed them. In benchmarking, the school administration adopted what could favour them while what was favouring the teachers was done away with. It was also noted that benchmarking was increasing paper work and workload in school. Indeed benchmarking can be stressful especially when teachers have to go to schools performing much better than them, they felt inferior and this distressed them so much. Benchmarking involves a teacher going to unfamiliar environment to get data. Depending on the kind of reception the teacher is given determines the level of stress the teacher is bound to receive. Good reception motivates the teacher and reduces stress while bad reception increases stress on the teacher. Location of the school reduced teacher stress by .022 percent as signified by the coefficient of -.022. That is, for every one percent change in location of the school, teacher stress reduced by .022 percent. Location of secondary schools in Kakamega North Sub-county reduced teacher stress. Teachers choose where to teach. Only few teachers are forced to teach in some areas. When teachers are seeking employment, they are given a contract to sign that demands that they have to stay in the current station for five at least five years, this makes the newly employed teachers do not to get stressed about the location of the school. For the other teachers, when requesting for a transfer, they are to give three schools they prefer to go to and so most teachers are not affected so much by the location of the school. In this respect, the Teachers Service Commission county director stated, "Newly employed teachers are forced to sign a contract that forces them to stay in the station for five years and so most of them don't get stressed up with the issue as they feel it's something beyond their control. As for the other teachers, they have a choice to transfer to the areas they prefer with valid reasons. Only few teachers are forced to teach in areas they don't like and it could be because we have not gotten a suitable replacement for the teacher."

The findings of this study are in line with the findings of Ang'alka, Aloka and Raburu (2016) in their study on school physical environmental factors responsible for stressful experience among teachers in Kenyan special primary schools that there was a statistically significant relationship between

school physical environmental factors and stress. School physical factors contributing to stress among teachers included travelling far distances to schools and lack of enough latrines. However, the relationship that existed was positive while in the current study, the relationship is negative. According to Ang'alika, Aloka and Raburu (2016), location of the school leads to increase in stress among teachers while in the current study, one unit increase in location of the school leads to a reduction of stress among teachers. Indeed when a teacher has to travel for a long distance to school, this distresses him or her teacher has to spend more money on transport and so this stresses the teachers and so improvement on location reduces the teachers' stress. Since regression analysis is a stronger statistic than Pearson's "r" for measuring influence of predictor variables, the study concluded that the six factors were the ones that significantly influenced teacher stress. Regression model is  $Y = 2.345 - .022X_1 + .129X_2 - .192X_3 + .117X_4 - .190X_5 + .199X_6$ .

## Conclusion

Location of school, gender parity of students and Board of Management of schools had a negative influence on teacher stress while evaluation policy on students, benchmarking policy and school ethos customs and tradition had positive influence on stress among public secondary school teachers.

## Recommendation

With regard to the finding that benchmarking increases teachers stress, the study recommended that there should be a reduction of benchmarking activities in the school and the administrations should make proper investigation before selecting schools for benchmarking. In light of the finding that school ethos, customs and traditions increases teachers stress, the study recommended that changes be made on customs, ethos and traditions of the school to help in reducing stress that is caused by teachers having to go through the same routine every time. With regard to the finding that teachers job groups increased teachers stress, the study recommended that the government allows faster movement of teachers from one job group to another to reduce stress originating from stagnation in one job group. With regard to the finding that evaluation policy on students increases stress among teachers, the study recommends that the formative examinations deadlines be extended to give teachers humble time to mark and revise the examinations done in schools.

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